



US Army Corps
of Engineers
Buffalo District

LAKE ONTARIO ORDNANCE WORKS

Small Bermed Clearings (SBCs) Investigation

November 12, 2003



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LOOW SBC Investigation

Overview

- Site History
- Previous Work
- Current Investigation
- Field Screening Results
- Future Plans

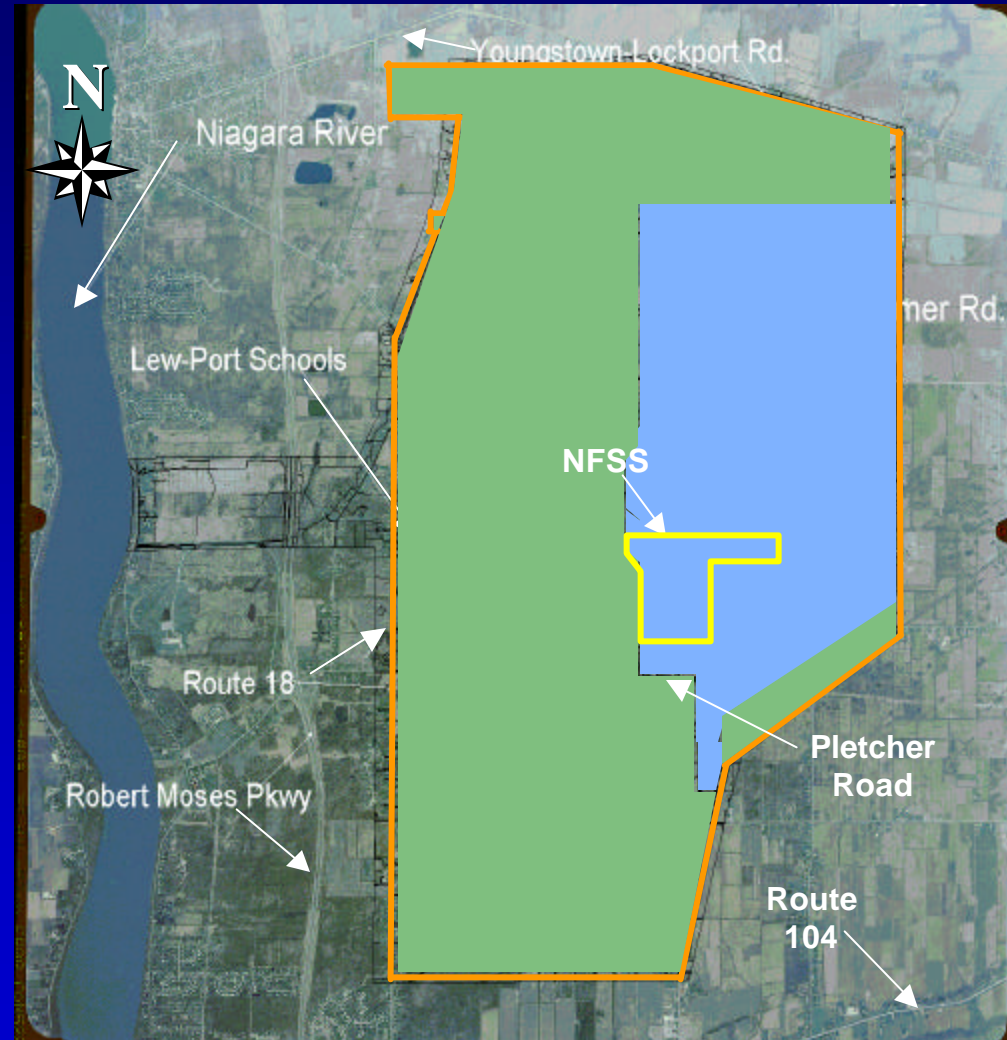


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Site History

- 7,500 acre site
- Jan 1942 – Construction Start
- Oct 1, 1942 – Begin Operation
- Oct 16, 1942 – First TNT was produced
- July 31, 1943 – Shut Down
- 1944 – Begin transfer of ownership/use
- 1945 – 5,000 acre undeveloped area declared surplus

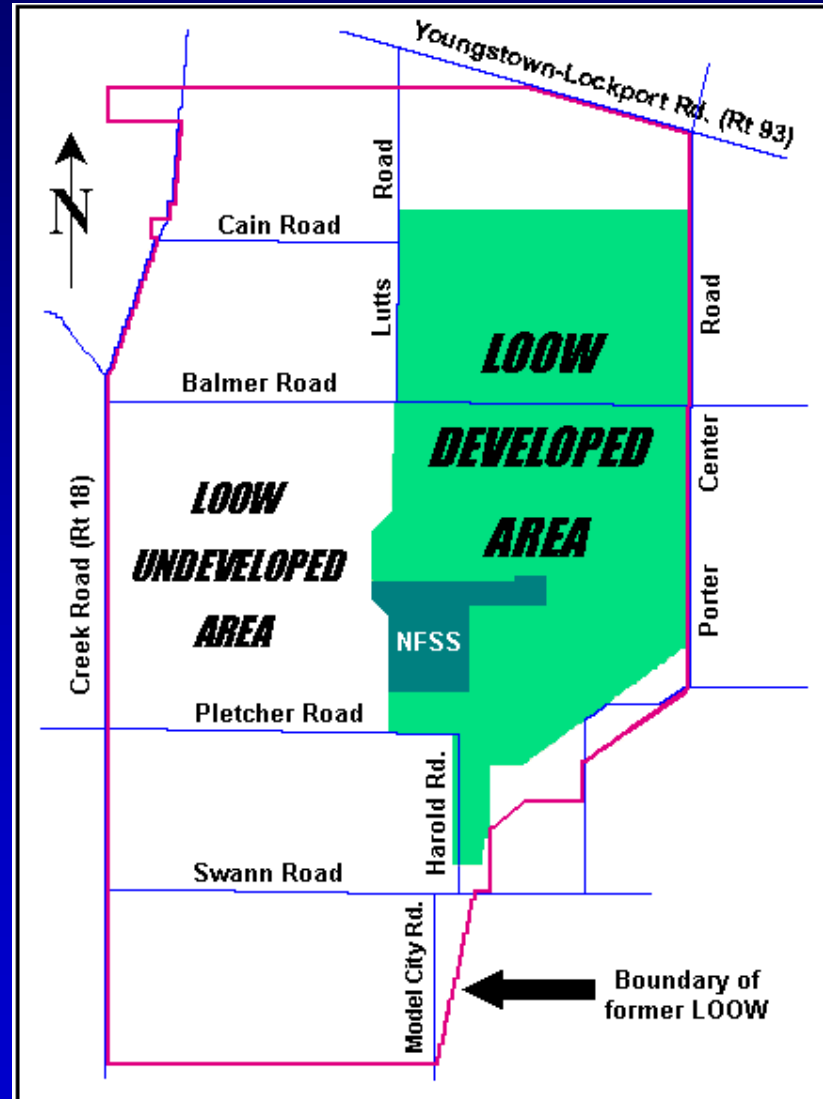




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Site Map





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Previous Work

- 1997 – Remedial Investigation begins
- 1998 – History Search Report
 - Types and location of past operations
 - Primarily focused on Developed Area
 - Identified need for comprehensive aerial photograph analysis of undeveloped area



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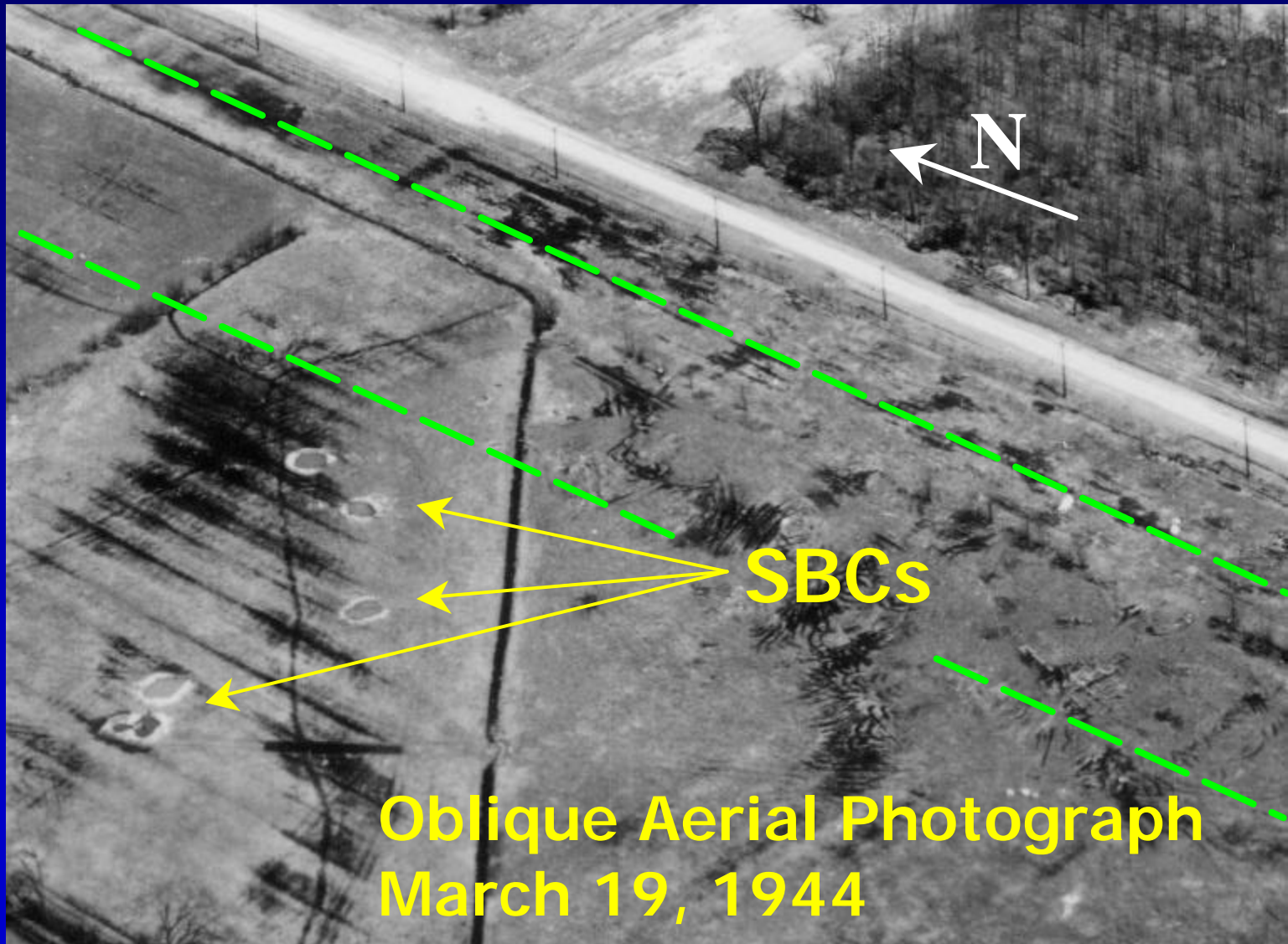
Current Investigation

- Sep 2002 – Topographic Engineering Center Final Report
 - Analyzed photos from 1938 – 1997
 - Obtained/declassified 1944 obliques
 - Identified approximately 120 SBCs
- USACE Project Team
 - Conducted field reconnaissance
 - Identified potential existing SBCs based on land use



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Oblique Aerial Photograph
March 19, 1944



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Current Investigation (cont.)

- Identified 3 common features:
 - Similar size and shape
 - Located outside TNT production/storage area
 - Created between Apr 1942 – Mar 1944
- Conclusion: probable use as burn pits
- Coordinated work plans with LOOW Technical Committee
- Sampled 12 SBCs in August 2003



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Field Screening Results

- Rad levels consistent with background
- Minimal detection of volatile organic compounds (VOCs) with flame ionization detector (FID)
- TNT concentrations:
 - Below action level (EPA Region III Risk Based Concentration residential action level of 21 ppm)
 - Below test kit detection limit (0.7 ppm)



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Future Plans

- Compile results from field and laboratory analyses
- Provide final report to LOOW Technical Committee – January 2004
- Recommend plan of action for all SBCs